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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,193	08/04/2003	Tsai-Ching Chen	CFP-1593-1 (15722/374CIP)	7071
23595	7590	07/28/2005	EXAMINER	
NIKOLAI & MERSEREAU, P.A. 900 SECOND AVENUE SOUTH SUITE 820 MINNEAPOLIS, MN 55402			TALBOT, MICHAEL	
			ART UNIT	PAPER NUMBER
			3722	

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/634,193

Applicant(s)

CHEN ET AL.

Examiner

Michael W. Talbot

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on amendment filed on 02 May 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-18 is/are allowed.
- 6) ☒ Claim(s) 2-13, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

It has been noted that claim 13 is identified as (currently amended) and should be identified as (original) since no revisions have been made to the recited limitations.

#### *Specification*

1. The revised abstract commencing on page 8 of the Applicant's amendment filed on 02 May 2005 has been received and is acceptable.

The revised specification commencing on page 2 of the Applicant's amendment filed on 02 May 2005 has been received and is acceptable.

#### *Claim Objections*

2. The objection to the claims is withdrawn due to the revised set of claims commencing on page 5 of the Applicant's amendment filed on 02 May 2005.

#### *Claim Rejections - 35 USC § 112*

3. The rejection to the claims under second paragraph of 35 U.S.C. 112 is withdrawn due to the revised set of claims commencing on page 5 of the Applicant's amendment filed on 02 May 2005.

However a new rejection under second paragraph of 35 U.S.C. 112 is warranted and noted below:

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7,19 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 7,19 and 20 recite the limitation that the second section, which is the lesser dense section of the coil spring, contacts the tool bit. This is contradictory to that depicted in

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Figure 5 showing the first section, which is the more dense section of the coil spring, being in contact with the tool bit and supported by the specification on page 4, line 22 through page 5, line 6. For examination purposes, the more dense section of the coil spring is this section that contacts the tool bit as shown by the Figures.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. '085 in view of WO 01/28721. Chen et al. '085 shows in Figures 2-5 a chuck device having a socket (40) defining a chamber (42) for receiving a tool bit (80) and at least one aperture (48) communicating with chamber, a spindle (10) extending from socket, at least one ball (45) received in aperture for entering annular groove (82) of tool bit, a sleeve (60) including a chamber (61) and an annular groove (64) communicating with chamber for receiving the ball and a first elastic element (50) compressed between socket and sleeve. Chen et al. '085 lacks a second elastic element placed in the socket chamber for pushing the tool bit being a coil spring and having a first section that is denser than a second section. WO 01/28721 shows in Figures 2/16 and 7/16 (a) a coil spring (9) with a more dense section (9A) and a lesser dense section (9B). In view of this teaching of WO 01/28721, it is considered to have been obvious to provide the chuck of Chen et al. '085 with the spring shown by WO 01/28721 in order to hold the locking balls (45) in their retracted position and to eject the tool bit using a single piece member.

Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. '085 in view of WO 01/28721. Chen et al. '085 in view of WO 01/28721 shows in the Prior Art

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Figures 11 and 12 a chuck device having a socket defining a chamber for receiving a tool bit (94) and at least one aperture communicating with chamber, a spindle extending from socket, at least one ball (92) received in aperture for entering annular groove (95) of tool bit, a sleeve (90) including a chamber and a annular groove (91) communicating with chamber for receiving the ball, a first elastic element (93) is compressed between a ring (not indexed) and the sleeve, the sleeve including an annular rib (not indexed) formed on an internal face wherein the first elastic element is compressed between the ring and the annular rib, and another ring fit in the sleeve for abutting the ring attached to the socket so as to retain the sleeve on the socket.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. '085 in view of WO 01/28721, further in view of Rosanwo '989. Chen et al. '085 in view of WO 01/28721 lacks the first ring received in an annular groove defined in the external surface of the socket being a C-ring. Rosanwo '989 shows in Figure 2 a snap ring (11) received in an annular groove defined in the external surface of the socket (5). In view of this teaching of Rosanwo '989, it is considered to have been obvious to replace the locking ring shown in Figures 11 and 12 of Chen et al. '085 in view of WO 01/28721 with a snap or C-ring received in an annular groove as shown in Rosanwo '989 to provide a more secure/locking fit.

Claims 9-13 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. '085 in view of WO 01/28721, further in view of Wang '384. Chen et al. '085 in view of WO 01/28721 lacks a C-ring received in the socket annular groove for entering the annular groove of the tool bit. Wang '384 shows in Figures 2 and 4 a C-ring (2) received in an annular groove (11,110) of the socket (1) for entering the annular groove (82) of the tool bit (80). In view of this teaching of Wang '384, it is considered to have been obvious to replace the locking element of Chen et al. '085 in view of WO 01/28721 with another well-known locking element

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shown in Wang '384. With regards to claim 13, Chen et al. '085 further shows in Figure 1 the socket having an internal face with six sides and six corners.

Claims 2,3,5,7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasan '872 in view of WO 01/28721. Hasan '872 shows in Figures 1A and 3 a chuck device (100) having a socket (110) defining a chamber (120) for receiving a tool bit (300) and at least two apertures (130) communicating with chamber, a spindle (10) extending from socket, at least one ball (170) received in each aperture for entering annular groove (330) of tool bit, a sleeve (180) including a chamber (col. 5, lines 10-13) and a annular groove communicating with chamber for receiving the balls and a first elastic element (360) compressed between the socket and the sleeve. Hasan '872 further shows in Figures 14A and 14C a ring (186) attached to the socket wherein the first elastic element is compressed between the ring and the sleeve and an annular rib (250) formed on the internal face of the sleeve wherein the first elastic element is compressed between the ring and the annular rib (col. 4, lines 54-57). Hasan '872 lacks a second elastic element placed in the socket chamber for pushing the tool bit being a coil spring and having a first section that is denser than a second section. WO 01/28721 shows in Figures 2/16 and 7/16 (a) a coil spring (9) with a more dense section (9A) and a lesser dense section (9B). In view of this teaching of WO 01/28721, it is considered to have been obvious to provide the chuck of Hasan '872 with the spring shown by WO 01/28721 in order to hold the locking balls (45) in their retracted position and to eject the tool bit using a single piece member.

Claims 9-11,13 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasan '872 in view of WO 01/28721, further in view of Wang '384. Hasan '872 in view of WO 01/28721 lacks a C-ring received in the socket annular groove for entering the annular groove of the tool bit. Wang '384 shows in Figures 2 and 4 a C-ring (2) received in an annular groove (11,110) of the socket (1) for entering the annular groove (82) of the tool bit (80). In view of this

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teaching of Wang '384, it is considered to have been obvious to replace the locking element of Hasan '872 in view of WO 01/28721 with another well-known locking element shown in Wang '384. With regards to claim 13, Hasan '872 further shows in Figure 5D the socket having an internal face with six sides and six corners.

#### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1 and 9 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Allowable Subject Matter***

6. Claims 14-18 are allowed.

Claim 14 has been rewritten in independent form including the allowable subject matter cited in the original office action dated 10 March 2005. Claims 15-18 are therefore allowable as they depend from claim 14.

7. Claim 19 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

#### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,



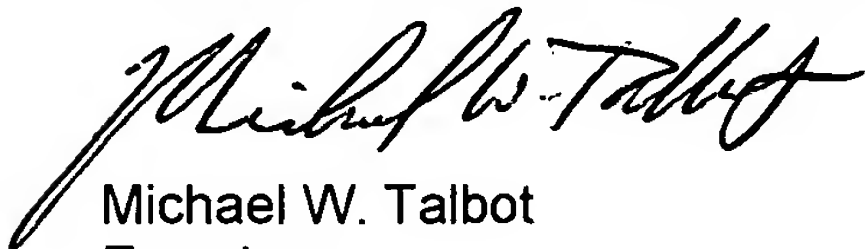
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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

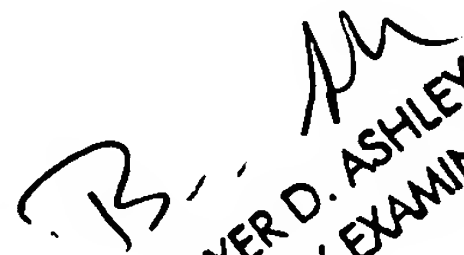
Any inquiry concerning the content of this communication from the examiner should be directed to Michael W. Talbot, whose telephone number is 571-272-4481. The examiner's office hours are typically 8:30am until 5:00pm, Monday through Friday. The examiner's supervisor, Mr. Boyer D. Ashley, may be reached at 571-272-4502

In order to reduce pendency and avoid potential delays, group 3720 is encouraging FAXing of responses to Office Actions directly into the Group at FAX number 571-273-8300. This practice may be used for filling papers not requiring a fee. It may also be used for filing papers, which require a fee, by applicants who authorize charges to a USPTO deposit account.

Please identify Examiner Michael W. Talbot of Art Unit 3722 at the top of your cover sheet.



Michael W. Talbot  
Examiner  
Art Unit 3722



BOYER D. ASHLEY  
PRIMARY EXAMINER